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**Combating the ASW Threat with Operational Art: Ensuring Efficiency Through Unity
of Effort with the Theater Undersea Warfare Commander**

by

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**A paper submitted to the Faculty of the Naval War College in partial satisfaction of the
requirements of the Department of Joint Military Operations.**

**The contents of this paper reflect my own personal views and are not necessarily
endorsed by the Naval War College or the Department of the Navy.**

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Contents

Introduction	1
Counter-Argument	2
Background: Technology and Historical Examples	5
Operational Art Functions	9
Principles of War: Mass and Offensive	12
The Operational Commander	15
Conclusions	16
Recommendations	18
Bibliography	19

Abstract

Combating the ASW Threat with Operational Art: Ensuring Efficiency Through Unity of Effort with the Theater Undersea Warfare Commander. A shift in the U.S. Navy's strategy has changed its focus from a force dominant in the open oceans of the world to one required to establish and maintain local sea control in the littoral environment. This shift will have a significant impact on the manner the force is trained, equipped, led, and ultimately fought. Analysis suggests that a shift in focus to the littoral environment will open a critical vulnerability to capable modern diesel submarines operating in the anti-access/area denial role. An objective evaluation suggests that while training and equipment improvements are being addressed, a doctrinally established command structure will be required to maximize the benefits of technology to defeat this threat. This paper will explore efficiencies gained in functions of intelligence, protection, and command organization as well as selected principles of war of mass and offensive based on historical examples of unifying effort under a single commander. Finally, the author will stress some key qualities that a commander should possess to optimize benefits. These conclusions lead to the recommendation to establish a Theater Undersea Warfare Commander to assure the unity of effort required for success in the littoral ASW fight.

INTRODUCTION

From the introduction of *From the Sea* and through successive iterations in U.S. Navy strategy to the current *A Cooperative Strategy for the 21st Century Seapower*, the U.S. Navy has shown a significant shift in its maritime strategy. The requirement to adjust modern naval strategy was based on the evolution of the types of maritime operations conducted since the conclusion of World War II. Author Otto Kreisher notes in his article on renewed interest in Anti-Submarine Warfare (ASW), Chief of Naval Operations Admiral Vern Clark concluded what the President needed from the Navy was access to coastal states littoral waters in order to project U.S. power ashore.¹ To project U.S. power ashore, a force able to establish and maintain local sea control in the littoral environment is required.

Crucial to establishing and maintaining local sea control in the littoral environment is the ability to combat the anti-access/area denial capability of diesel submarines. Kreisher observed that Admiral Clark directed the creation of organizations to look at what technologies were available to fix the anti-access/area denial problem these submarines created.² Ultimately, these organizations were tasked with developing and fielding new tactics, techniques, procedures, and technologies to rapidly advance the U.S. Navy's mastery of ASW. Despite the advances in technology, tactics, and procedures, a seam still exists in the lack of unity of effort required to efficiently utilize technological advances.

Historic examples from WW II and the Cold War show that utilizing technological advances alone against the submarine threat proved largely unsuccessful. Rather, it was advances in technology combined with the advantages offered by unity of effort which ultimately proved successful. These historic examples show that unity of effort improved the

¹ Otto Kreisher, "As Underwater Threat Re-emerges, Navy Renews Emphasis on ASW," *Sea Power* 47, no. 10 (2004): 15, accessed 17 February 2012, ProQuest.

² Ibid.

effectiveness of operational intelligence, protection, and command organization. Improved effectiveness in the functions noted enhanced efficiency in massing forces and conducting offensive operations against the submarine threat. The unity of effort exercised during these two wars has been allowed to atrophy during the last two decades as maritime attention focused on belligerents lacking an ASW capability. A command organized to re-establish the unity of effort exercised during WW II and the Cold War must be fully developed and practiced now to ensure future littoral operations are successful. To combat the ASW threat in the littoral environment, Combatant Commanders require the unity of effort that can be provided by a doctrinally established Theater Undersea Warfare Commander (T-USWC).

COUNTER-ARGUMENT

A strong argument can be made that a theater Joint Force Maritime Component Commander (JFMCC) could provide the unity of effort required to combat the undersea threat. Among the many tasks assigned the JFMCC in Joint Pub 3-33 is the responsibility to:

- *Control the operational level synchronization and execution of joint maritime operations, as specified by the CJTF, to include adjusting targets and tasks for available joint forces/capabilities.*
- *Assign and coordinate target priorities within the assigned AO by synchronizing and integrating maneuver, mobility and movement, fires, and interdiction. The JFMCC nominates targets located within the maritime AO to the joint targeting process that may potentially require action by another component commander's assigned forces.*³

There are several limits to this solution, including lack of doctrine and experience with a theater JFMCC, focus of effort, persistence, and experience of the assigned JFMCC that make this option less than desirable. Additionally, based on developing technologies, the physical location of a JFMCC staff may limit its ability to provide unity of effort.

³ Chairman, U.S. Joint Chiefs of Staff, *Joint Task Force Headquarters*, Joint Publication (JP) 3-33 (Washington, DC: CJCS, 16 Feb 2007), III-12, fig. III-7.

Proponents of the argument for a theater JFMCC providing unity of command would find validation in the example displayed by the creation of a theater Joint Force Air Component Commander (JFACC), similar to the JFACC that supports CENTCOM operations in Iraq and Afghanistan. The theater JFACC utilized in support of CENTCOM operations established the doctrine and experience necessary to provide unity of effort needed to answer the issue of high demand and limited air asset availability. However, as General (ret) Luck and Colonel (ret) Findley note in their focus paper covering the initial establishment of a theater JFACC, there were several growing pains associated with this new command structure. Significant to this argument are their observations of a lack of doctrine and experience for a theater JFACC and the weakening of relationships, trust, and confidence due to changed organization and command structure initially.⁴ Currently, the Navy has not developed doctrine to address the possibility of a theater JFMCC and has no experience utilizing this command organization. To provide unity of effort, a doctrinally established theater JFMCC organization would need to be implemented and exercised to gain experience utilizing this command organization prior to hostilities commencing.

A theater JFMCC, if doctrinally established and organized similar to the theater JFACC noted above, could provide unity of effort against the ASW threat. However, unlike a theater JFACC who only has the dimension of air to deal with, a theater JFMCC must focus on the air, surface, subsurface and land dimensions equally. Further challenging the JFMCC is the requirement to combat air, surface, and land threats utilizing the same multi-role platforms necessary to defeat the subsurface threat. This creates a strain on the focus of effort placed on any one dimension which provides seams that can be exploited by the

⁴ GEN (ret) Gary Luck and Col (ret) Mike Findley, *Joint Operations Insights and Best Practices*, 2nd ed., (Norfolk, VA: Joint Warfighting Center, U.S. Joint Forces Command, 20 Mar 2009), 3-4.

enemy. The stealth advantage submarines have due to their ability to hide in their environment make the vulnerability from the subsurface dimension particularly exploitable. The inability of a JFMCC to see the threat makes focusing effort against the submarine difficult, thereby increasing risk to forces.

To combat the inability of forces to see the threat coming, a persistent collection and awareness of theater submarine capabilities and operations are essential to mitigate risk early in an operation. The ability to project power ashore as a deterrent is often required prior to hostilities. This requirement may not have been anticipated and may necessitate intelligence on the operating area and threats on the fly. As an example, the lack of intelligence of the operating area and threat was a considerable concern for British forces at the opening of hostilities in the Falklands War. The ability to access operating area and threat data could assist operational commanders in determining an advantageous area for friendly forces to operate. The ability to access operating area and threat data may not be met initially by a theater JFMCC established at the opening of hostilities.

A further concern is that a theater JFMCC established at the opening of hostilities might lack experience in the subsurface environment. Depending on the primary operations being conducted, the JFMCC could be a Marine Officer, Coast Guard Officer, or a Naval Officer from a community that has no experience with the submarine threat. This lack of experience could impair the JFMCC's ability to make sound decisions concerning the submarine threat. This is a significant problem, in that the subsurface war is fought more like a counterinsurgency. In fact, author Jan Breemer correctly correlates fighting submarines to the counterinsurgency efforts currently underway in Iraq and Afghanistan comparing both

belligerents ability to conceal themselves in their environment.⁵ It is the submarines ability to hide in its environment, strike without warning, and then disappear back into its environment, similar to the manner insurgents use, that makes fighting this threat so difficult. This is contrary to the classical Mahanian strategy of defeating the enemy by attacking his main force and fails to conform to classic Anglo-American concepts of naval warfare that surface and air warfare commanders train to and are experienced in.⁶ To mitigate the risk inherent in the lack of experience fighting the submarine threat, the operational commander responsible for countering the ASW threat should have experience fighting this type of naval battle.

A final risk to consider is that depending on the operations assigned, a JFMCC may be stationed afloat. The technologies being developed today to counter the submarine threat will require the ability to process large amounts of data and the use of extensive communications equipment that may not be available to a deployed JFMCC. These projected requirements would be met by a shore based facility established to consolidate data and coordinate efforts. A T-USWC established at a shore facility to coordinate the collection and dissemination of the data from evolving technologies would ensure unity of effort against the ASW threat.

BACKGROUND: TECHNOLOGY AND HISTORICAL EXAMPLES

The utilization of evolving technologies proved crucial to success against the submarine threat in both WW II and the Cold War. The need to leverage technology is due primarily to the stealth aspect inherent in submarine operations which hinders the effort of naval forces to locate the threat. The lack of transparency of the oceans and inability of

⁵ Jan S. Breemer, "Chasing U-Boats and Hunting Insurgents," *Joint Force Quarterly* 40 (1st quarter 2006): 61.

⁶ Karl Lautenschlager, "The Submarine in Naval Warfare, 1901-2001," *International Security* 11, no. 3 (Winter 1986-1987): 94, accessed 24 February 2012, JSTOR.

modern technology to penetrate the oceans depths with any consistency provides submarines a distinct advantage in warfare. To counter this advantage requires persistent awareness of submarine locations. To achieve persistent awareness, the Navy invested heavily in a concept of “Network Centric Warfare.”⁷ Broadly outlined, this concept would have provided operational leaders with the ability to distribute tailored, self monitoring sensor fields managed by Unmanned Undersea Vehicles (UUV) to conduct the extensive search and localization phase of the ASW battle that is routinely asset intensive. While the ability to network sensors has met with technical difficulty, the Navy has proceeded with tests on distributed sensor fields and UUVs to monitor them. Currently, Commander Submarine Forces Headquarters is focusing on testing not only the technology, but also the command and control architecture required to optimize future war-fighting capability.⁸ The requirement for continued development is due, in part; to the large amount of data a projected sensor field would generate which hinders current command and control architecture. Once available, these sensor fields would act as force multipliers to cue war-fighters to the presence of a subsurface threat. The concept of “compressing the detect-to-engage sequence by employing sensor data, collaborative planning and rapid engagement to quickly destroy enemy forces” is crucial to the success of future offensive operations and would mark a return to WW II and Cold War strategies to defeat the ASW threat.⁹ What is currently lacking is the command structure essential to tie these sensors to the operational units

⁷ William Holland, “Network Centric Warfare in ASW,” *Naval Forces* 22, no. 5 (2001): 8, accessed 24 February 2012, ProQuest.

⁸ Brent Johnson and John Richardson, “Unmanned, Unseen, & Under the Sea,” *United States Naval Institute, Proceedings* 137, no. 6 (Jun 2011): 42, accessed 24 February 2012, ProQuest.

⁹ Richard Burgess, “Awfully Slow Warfare,” *Sea Power* 48, no. 4 (April 2005): 13, accessed 24 February 2012, ProQuest.

required to attack them. The establishment of a T-USWC would unify the effort of collection and provide a conduit for actionable intelligence upon which to capitalize.

The ASW battle in the Atlantic during WW II provided the U.S. Navy experience in unifying the command and control to defeat the submarine threat. The Navy was successful in countering the ASW threat by assigning responsibility to a single command in the temporarily established Tenth Fleet. Defense analyst John Benedict notes, that this command was established and, “organized into five divisions that performed, respectively, fusion and dissemination of operational intelligence, routing and rerouting of convoys based on surveillance and intelligence, allocation and coordination of ASW units (none were directly under the command of the Tenth Fleet per se), the development of doctrine and tactics, and the evaluation and fielding of material and equipment.”¹⁰ The Tenth Fleet was successful in leveraging technological advances in direction finding, RADAR, SONAR and communications to focus effort against the submarine threat. The command’s ability to consolidate and fuse intelligence was essential to massing effort against the submarine threat. The efficiencies gained by this unified effort under one command were essential to the success of forces in the American theater. The ability to rapidly consolidate and disseminate intelligence coupled with Tenth Fleet’s theater wide visibility of all assets allowed this single command to mass effort in offensive and defensive actions to defeat the submarine threat in the Atlantic. The fact that Tenth Fleet was able to accomplish this despite having no assets directly assigned is significant. It was the command’s theater wide visibility that allowed them to assign missions to available assets. In today’s resource constrained environment, the

¹⁰ John Benedict, “The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare,” *Naval War College Review* 58, no.2 (Spring 2005): 93, accessed 17 February 2012, ProQuest.

ability to assign missions to available assets would be crucial to ensuring that unity of effort is achieved efficiently.

Entering the Cold War, the Navy built on its ability to ensure efficient use of forces utilizing technology to unify collection effort and cue forces to the presence of submarines. The U.S. Navy was highly successful during the Cold War utilizing fixed Sound Surveillance System (SOSUS) to locate Soviet submarines and assign assets to track them.¹¹ SOSUS acted as a force multiplier providing cuing which reduced search times, traditionally the most difficult aspect of the ASW process. A T-USWC could incorporate many of the characteristics observed in the now defunct command structure utilized during the Cold War to contain Soviet submarines.¹² The ability to place surveillance fields at any time and location would optimize the potential for offensive action by increasing the surveillance capability and rapidly focusing forces on localized submarines. To fully realize the benefits new sensor technologies would provide in enhancing the balance of force and time, Combatant Commanders must incorporate the robust cuing to war-fighter capability experienced during WW II and the Cold War. A T-USWC could provide the unity of effort required to maximize the benefits of these sensor fields and translate data quickly to the war-fighter closest to the threat. This unity of effort would considerably shorten the factor of time required at the opening of hostilities, if established and exercised now.

Establishing unity of effort is crucial to enabling the efficiency achieved by the Tenth Fleet and Cold War commands in massing assets offensively against the submarine threat. Instituting a T-USWC utilizing either model could provide the administrative and operational link required to unify the effort against the ASW threat that is currently lacking. Establishing

¹¹ Ibid.

¹² Ibid, 98.

the administrative and operational link under a single command in peace would provide opportunities to exercise those links prior to hostilities. The ability to rapidly transition from peace to hostile operations could prove vital in combating the submarine threat prior to its deployment, impacting the factor of time while simplifying the situation for operational commanders. A T-USWC established utilizing the division of responsibility modeled in the Tenth Fleet example would provide benefits that could improve efficiency in concentrating mass against the submarine threat throughout all phases of operations. Unity of command and ability to coordinate effort could be developed and implemented during scheduled training to exercise functions and principles of war against the submarine threat. Utilizing the Tenth Fleet model, a T-USWC could act as the conduit for lessons learned and assist in war-gaming and exercise development based on documented trends for that theater. This command would also be in place as new technologies enter the fleet offering efficiency in incorporating them to focus effort against the submarine threat. The most significant benefit establishing a T-USWC presents is a command with experience conducting theater wide operations that is in place prior to hostilities commencing.

OPERATIONAL ART FUNCTIONS

Experience exercising unity of effort will be essential in order to assure the operational art functions of intelligence, protection and command organization are mature prior to hostilities commencing. Advances in technology show the potential to enhance the functions of operational intelligence and protection with regard to the ASW threat. However, technological advances will challenge the function of operational command organizations currently utilized with the volume of data, as well as, unity of effort to combat the ASW threat. Vice Admiral Richardson and LCDR Johnson, of the command assigned to develop

the concept of operations for unmanned and undersea systems, identified that the command and control infrastructure required to integrate these sensors has challenged technology and remains unsolved.¹³ Establishment of a command and control structure is essential to fully incorporate these technologies and realize their potential. The establishment of a command and control structure must become a priority to address the ASW threat. Combatant Commanders should establish a T-USWC now to ensure that operational functions of intelligence, protection, and command organization are mature before hostilities begin.

A T-USWC established now would improve coordination of operational intelligence similar to the fusion accomplished by the Tenth Fleet. The benefits to operational intelligence provided by an established and exercised T-USWC could prove crucial in the opening of hostilities. In order to gain the sea control necessary early in the action, a thorough analysis of the factor of space is required to determine the best operating area. As Benedict insists, “knowledge of the environment is essential for antisubmarine warfare in any locale, but especially in the littoral waters...”¹⁴ Additionally, through experience gained in the theater of operations, a T-USWC could identify areas of interest used by belligerent submarines. Intelligence on submarine operating areas would assist in reducing the requirement on limited resources needed to monitor the area of operations and provide insight into potential safe operating areas. A T-USWC, providing the unity of effort to gather intelligence and coordinate surveillance or strikes, would support balancing factors of space, time, and force. Currently, as Benedict points out, “with the closing of surveillance information nodes..., ASW related intelligence support is unfocused and lacks continuous

¹³ Brent Johnson and John Richardson, “Unmanned, Unseen, & Under the Sea,” 44.

¹⁴ Benedict, “The Unraveling and Revitalization of the U.S. Navy Antisubmarine Warfare,” 98.

analysis and feedback.”¹⁵ A T-USWC could focus the intelligence effort against submarines in theater and provide the continuous analysis and feedback required in shaping contingency and crisis action planning.

In addition to focusing intelligence efforts, a T-USWC could focus operational protection against submarines similar to that experienced during WW II and the Cold War. With regard to operational protection, Captain Bill Toti, head of doctrine development at Fleet ASW Command argues, “Sea basing is all about access. ASW is about protecting our sea base.”¹⁶ The development and utilization of distributed sensor fields to detect approaching submarines will provide the cueing required to protect our forces and establish a sea base. The advantage of cueing would allow the T-USWC to alert forces to the threat and provide alternate operating areas. Conversely, the cueing these sensor fields provide act as force multipliers allowing ASW assets to focus on the threat by providing current intelligence on the submarine’s location. The challenge currently facing the Navy is getting the critical intelligence in the hands of those able to utilize it. Quoting Captain Toti, “The most important component of shortening the detect-to-engage timeline is tying the sensor to the shooter. A critical and frequently overlooked aspect of that timeline is having shooters in the right place in the right time in order to react.”¹⁷ Similar to the success of the Tenth Fleet and Cold War commands, a T-USWC could provide the cueing required coordinating the effort to protect forces against the submarine threat.

An essential aspect of protecting forces against the submarine threat is a sound command organization that is able to provide unity of effort. According to Milan Vego, “Operational command organization is perhaps one of the most critical and the most

¹⁵ Ibid.

¹⁶ Burgess, “Awfully Slow Warfare,” 13.

¹⁷ Ibid.

important of all operational functions. It is a framework that integrates all other theater-wide functions.”¹⁸ Currently, the Navy lacks the coherent command organization dedicated to the submarine threat provided during WW II and the Cold War. This command organization is essential to synchronize the factors of time, space, and force against the submarine threat. A T-USWC would provide the unity of command required to effectively employ joint forces against the submarine threat. A command organized under a T-USWC would ensure appropriate command and control (C2) functions were in place to address the submarine threat. The challenges in C2 a T-USWC face need to be addressed in peace to ensure success in war. If we are to maximize the potential of distributed sensors utilized as force multipliers, then an established C2 network needs to be created and exercised regularly. Despite billions of dollars spent on communications, the Department of Defense still lacks a C2 net that integrates all military assets to tie the sensor to the shooter.¹⁹ A T-USWC could utilize war gaming and exercises to institute a C2 structure that would be mature at the opening of hostilities. Finally, a command under a T-USWC could exercise the C2 structure required to realize the benefits of emerging technologies and tie the sensor to the war-fighter.

PRINCIPLES OF WAR: MASS AND OFFENSIVE

A doctrinally established command under a T-USWC could coordinate all efforts to utilize emerging technologies to tie the sensor to the war-fighter against the submarine threat. The unity of effort this would provide could improve efficiency in applying the principles of war of mass and offensive to an objective such as a submarine that can otherwise prove difficult. High demand of limited assets available to counter the submarine threat makes

¹⁸ Milan Vego, *Joint Operational Warfare: Theory and Practice* (2007; repr. Newport, RI: Naval Warfare College, 2009), VIII-20.

¹⁹ Sandra Erwin, “Shrewd Tactics Underpin Navy Strategy to defeat Diesel Submarines,” *National Defense* 89, no. 616 (March 2005): 19, accessed 24 February 2012, ProQuest.

mass and offensive difficult to achieve. Historic examples from WW II and the Cold War show that to accomplish these principles of war against the submarine threat requires unity of effort. To counter the growing number of modern diesel submarines among potential belligerents, including over one hundred between China, North Korea and Iran, Combatant Commanders must ensure unity of command exists.²⁰ The growing number of countries operating quiet diesel submarines is a threat to all geographic Combatant Commanders' ability to exercise sea control in the littorals.

Achieving mass against a submarine with limited assets is a challenge to all geographic Combatant Commanders' ability to exercise sea control in the littorals. This challenge is further aggravated by limited assets that may be assigned multiple defense roles in competing warfare areas. As defense analyst Karl Lautenschlager points out, submarines are fundamentally different in that they utilize stealth and surprise and are most effective when operating alone and dispersed.²¹ As such, the effort expended in time and number of platforms required for searching, detecting, localizing, tracking, and attacking a single submarine is inconsistent with other naval threats. Consider that at the peak of WW II, more than five thousand allied ships and aircraft were involved in hunting submarines compared to less than three hundred and fifty surface combatants available today. Simply massing sufficient assets becomes a problem.²² The multi-mission aspect of today's modern combatants complicates the effort to assign assets to this singular threat. The number of multi-mission combatants required to counter the stealth of a single submarine limits their availability to accomplish other requirements in air and surface defense. Unity of effort under a single command could provide for more efficient tasking of theater wide available

²⁰ Kreisher, "As Underwater Threat Re-emerges, Navy Renews Emphasis on ASW," 15.

²¹ Lautenschlager, "The Submarine in Naval Warfare, 1901-2001," 94.

²² Benedict, "The Unraveling and Revitalization of U.S. Navy Antisubmarine Warfare," 95.

assets. Unity of effort under a T-USWC could provide a single point to consolidate intelligence and coordinate effort against the submarine. The coordination effort a T-USWC could provide may alleviate the strain on assets available by reviewing the entire theater versus an operating area for ASW or joint assets that may be available and sufficient to counter the ASW threat. Efficient tasking of theater wide assets could be realized by a T-USWC with intelligence on the submarine threat coupled with the ability to coordinate all available forces to mass against the threat.

Experience efficiently tasking theater wide joint and multi-mission assets will be essential if the Navy is to seize the initiative and regain the offensive capability it possessed against the submarine threat during WW II and the Cold War. This offensive capability was crucial to the balance achieved during the Cold War required to counter the ASW threat. This balance consisted of a layered defense coupled, with the offensive ability to monitor the submarine threat early, prior to forces closing within weapons range. With the closing of the Cold War, and a shift in focus away from the maritime domain, these offensive capabilities have atrophied. The tactic to rapidly deploy U.S. forces to restrictive littoral operating areas to preempt deployment of submarines will increase the need for offensive capabilities.²³ To be effective, the Navy will need to adopt a more joint approach to what is incorrectly assumed to be a Navy centric problem. As Vego states, fighting the ASW threat in the littorals, requires the combat arms of other services, especially land based aircraft.²⁴ The ability of other services to achieve the objective and attack the threat prior to naval forces arriving make their contributions crucial to the success of this effort. This joint approach to ASW in the littorals is a primary means to increase the factor of force and re-apply offensive

²³ Erwin, "Shrewd Tactics Underpin Navy Strategy to defeat Diesel Submarines," 18.

²⁴ Milan Vego, "Antisubmarine Warfare (ASW) in the Littorals," (Newport RI, Naval War College, 2010), 3.

action to the ASW threat. The ability to focus the efforts of other services towards the command, control, supply, and basing facilities of belligerent submarines brings the fight to the enemy early. Additionally, the potential to catch submarines in port or at chokepoints makes the naval commander's problem significantly simpler. A necessary component required to maximize efficiency is the establishment of a T-USWC to unify the efforts of joint forces to achieve success.

THE OPERATIONAL COMMANDER

The operational commander chosen to lead the command tasked with ensuring efficiency and unity of effort will be essential to success in defeating the littoral ASW threat. Combatant Commanders would benefit from considering carefully who fills the role of T-USWC. Professional knowledge and experience are essential to be effective in a fight against a naval threat that acts more like an insurgent than a traditional combatant. The skills utilized in one warfare area may not be useful in another as evidenced in the "Great Scud Hunt" of the Gulf War where leaders practiced in ground and air warfare were stymied by the stealth like qualities of movable launchers.²⁵ Considering the lethality of the threat and the cost of losing, the operational commander needs the focus that may not be present in a commander fighting an air, surface, subsurface, and potentially amphibious action. "ASW is not a "pick up" game for amateurs."²⁶ It requires an acute understanding of the environment coupled with an unwavering focus on the objective to balance ends, means, and ways. The Combatant Commander doctrinally establishing a billet for a T-USWC could define and staff that billet based on their perceived requirements.

²⁵ Holland, "Network Centric Warfare in ASW," 8.

²⁶ Ibid, 12.

Professional knowledge in the art of ASW will be an essential element of the T-USWC billet. Professional knowledge will be crucial to determine the current force capabilities and future force requirements to combat the submarine threat. Through constant exercise and evaluation, a T-USWC may provide Combatant Commanders the insight required to determine force requirements to counter this threat. Additionally, the ability to develop and evaluate forces and implement lessons learned on a continuing basis will ensure the force is ready and postured for success at the opening of hostilities to defeat the threat.

Finally, a command established and exercised continuously in peace under a T-USWC provides consistency in a theater. The consistency in a theater a T-USWC provides may not be matched by a JFMCC that is stood up to address temporary issues. That consistency can be leveraged by the T-USWC to develop multi-national relationships in the theater to address common threats. These relationships could be cultivated through multi-national exercises offering additional capabilities to the T-USWC. These capabilities could include the utilization of indigenous diesel submarines to train U.S. forces against these capable threats. Establishing these relationships in peace provides the opportunity to exercise a balance of ends, ways, and means with these multi-national partners. A T-USWC could ensure that these recurring exercises are well reported by news agencies to send a message that procuring submarines will not deter U.S. ability to access the littorals.²⁷

CONCLUSIONS

A shift in the U.S. Navy's strategy has changed its focus from a force dominant in the open oceans of the world to one required to establish and maintain local sea control in the littoral environment. The necessity to move U.S. combatants into the littoral environment will open a critical vulnerability to capable modern diesel submarines operating in the anti-

²⁷ Burgess, "Awfully Slow Warfare," 14.

access/area denial role. The modernization and proliferation of quiet diesel submarines among potential future adversaries advocate that they recognize and intend to exploit this vulnerability. The risk posed to costly carrier and amphibious assets are great and need to be addressed. Attempts to diminish the impact of submarines through training and technological improvements are being addressed. However, there is currently no doctrinally established command structure to fully integrate the benefits of technology to defeat this threat.

The lack of a command structure to provide unity of effort limits the efficiency and effectiveness of the functions of intelligence, protection and command organization. To be successful regarding the ASW threat, the operational art functions of intelligence, protection, and command organization are essential. Technological advances will enhance the functions of operational intelligence and protection but challenge command organizations with the volume of data. The volume of intelligence data that future technologies will create limits its usefulness to deployed units. This limitation suggests that a shore based command needs to be created to process and distribute actionable intelligence. Establishing this command to operate continuously will ensure operational functions are mature at the opening of hostilities.

The lack of a doctrinally established command structure to provide unity of effort makes achieving traditional principles of war in mass and offensive difficult. This effort is further hindered by reduced assets available to counter the submarine threat. Additionally, the multi-role characteristic of those assets makes allocation to a single purpose to combat a singular threat inefficient. Technological advances offer solutions to this problem by acting as a force multiplier. The current lack of a command structure to tie those technologies to

available forces is a limiting factor in maximizing the utilization of these technologies for mass and offensive.

Historical evidence from WW II and the Cold War show that unity of effort against the submarine threat is crucial to success. A T-USWC would restore the unity of command necessary to address the ASW threat that has been missing since the end of the Cold War. Doctrinally establishing a T-USWC provides the combatant commander the opportunity to define roles and authorities. Establishing a T-USWC in peace ensures those roles and authorities are mature prior to hostilities. Establishing a T-USWC also provides the Combatant Commander the opportunity to define and select the type of operational commander responsible for leading the effort against the submarine threat. The benefit of establishing a T-USWC and the improvements unity of effort brings to the ASW fight is essential to ensure success in the future.

RECOMMENDATIONS

These conclusions lead to the recommendation to establish a T-USWC to unify command and effort against the submarine threat. A study should be implemented to determine the best level to establish a T-USWC in the operational chain of command. Once that level of command is determined, a T-USWC should be doctrinally established to outline authorities. The T-USWC should be permanently established and operational to ensure unity of effort is mature prior to hostilities. Based on the projected requirements of evolving technologies, the T-USWC should be established at a shore facility. To ensure success, the assigned operational commander should be schooled in the art of ASW, able to foster relationships with coalition partners and work well with the press.

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